

REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claims 6-9 have been added. Support for these new claims can be found at p. 4, lines 29-31 of the application.

Claims 1-4 were rejected under 35 U.S.C. § 102(b) as anticipated by Berger et al. (U.S. Pat. No. 5,778,717) ("the '717 patent"). Applicants respectfully traverse this rejection.

Applicants maintain that the arguments presented in the previous response sufficiently distinguish claims 1-4 from Berger et al. to render an obviousness rejection based thereon inappropriate. Claim 1 requires a step wherein a wedge-shaped strip contacts a partitioning device so as to absorb transverse stresses proximate the measuring roller. This allows the tensile stresses in the strip to be accurately determined by the measuring roller.

Berger fails to teach this feature of the claim 1. The deflection rollers 26, 28 taught by Berger serve to increase the angle of the wrap with respect to the control rollers in order to increase the influence of the control rollers. (Col. 3, Il. 43-48). Berger completely fails to teach or suggest that the deflection rollers 26, 29 are able to absorb transverse stresses in the strip proximate the measuring roller which are caused by the asymmetric introduction of tension and distortions in the strip. When such transverse stresses are present in the strip, the measuring roller provides inaccurate measurements due to the towel effect. (application page 3, lines 4-28). As a result of these inaccurate measurements, accurate control and regulation of the strip planeness cannot be obtained. (application page 3, lines 22-28).

Not only does Berger fail to teach that partitioning device that can absorb transverse stresses, it teaches against the use of deflection rollers to increase strip planeness. Berger teaches that it is advantageous to disengage the deflection rollers located on the outlet side (the side corresponding to the winder 5 of the current invention) of the device when regulation of the strip's flatness is desired. (Col. 4, ll. 4-7). As can be seen in Figures 3 and 4 of the current invention, the very thing Berger teaches against is the very thing practiced under the current invention. Rather than removing the deflection rollers, the current invention employs a partitioning device to absorb transverse stresses.

The Applicants have included Exhibits A and B along with this response (these Exhibits were also submitted with the Amendment & Response filed on May 7, 2003). Exhibit A comprises a declaration by the inventors identifying the problems associated with the rolling of a wedge-shaped strip. The declaration also discusses how the inventors have solved the problems associated with rolling wedge-shaped strip.

In addition to this declaration, Exhibit B involves a letter written by a co-inventor of the Berger patent, Brend Berger himself. Clearly Mr. Berger understands what his patent disclosed. Mr. Berger states that in rolling wedge-shaped strip, additional tension distortions are caused by a varying tightness over the width of the strip causing mistracking of the strip towards the tightly wound side. This results in inaccurate tension measurements. Berger concludes that the BFI rolling device (the company to which the current application has been assigned) represents a "clear quality improvement and production increase" over his own flatness control devices, which "could not be used on [wedge-shaped strips] or only to a limited degree." Clearly this demonstrates that the Berger reference failed to teach the partitioning device of claim 1. It further demonstrates a long felt need for such a device.

For these reasons, Berger fails to teach a step wherein a wedge-shaped strip contacts a partitioning device so as to absorb transverse stresses proximate the measuring roller.

Accordingly, claim 1 should be found in condition for an allowance.

The device recited in claim 2 involves a partitioning device adapted to absorb transverse stresses in a wedge-shaped strip proximate the measuring device. For the same reasons argued with respect to claim 1, Berger fails to teach this feature of claim 2. Claims 3-4 depend from claim 2. Therefore, these claims are in condition for an allowance for at least the reason that they depend from an allowable base claim.

New claims 6 and 7 require a further step of deriving values for controlling and regulating the strip planeness based upon the measured tension, wherein the tension is measured while the partitioning device contacts a portion of the strip. Nowhere does Berger et al. teach or suggest the derivation of such values. Rather, Berger teaches that the deflection rollers should be removed from contact with the band when flatness regulation is used. (Col. 4, lines 5-7.) Thus,



Berger teaches away from the invention disclosed in claims 6 and 7. Moreover, claims 6 and 7 involve the same feature discussed with respect to claims 1 and 2 above. For at least these reasons, claims 6 and 7 are in condition for an allowance.

Furthermore, claims 8 and 9 also involve a requirement that the device be able to derive values for controlling and regulating the strip planeness based upon a tension measured by the measuring roller while the partitioning device is in contact with a portion of the strip. As discussed above, Berger et al. fails to teach or suggest this aspect of claims 8 and 9. Moreover, claims 8 and 9 involve the same feature discussed with respect to claims 1 and 2 above. For at least these reasons, Berger et al. fails to render claims 8 and 9 obvious.

In view of the above, Applicant respectfully requests reconsideration of the application in the form of a Notice of Allowance.

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PATENT TRADEMARK OFFICE

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Respectfully submitted,

MERCHANT & GOULD P.C. P.O. Box 2903 Minneapolis, Minnesota 55402-0903 (612) 332-5300

By:

John J. Gresens Reg. No.: 33,112

JJG/TSW